

WHAT IS CLAIMED IS:

1. An image taking apparatus, comprising:  
an image pick-up element which picks up a plurality of images different in photographing condition;  
an image memory which temporarily stores said plurality of images picked up by said image pick-up element;  
an image-number-specifying device which specifies the number of images to be used for creating a composite image among said plurality of images stored in said image memory; and  
an image composer which creates said composite image by composing images of said number of images specified by said image-number-specifying device.
2. The image taking apparatus as recited in claim 1, wherein the number of images to be stored in said image memory is decided by capacity of said image memory and image size.
3. The image taking apparatus as recited in claim 1, wherein the number of images to be stored in said image memory is the maximum number of images to be stored in said image memory.
4. The image taking apparatus as recited in claim 1, further comprising a display for displaying said plurality of images stored

in said image memory side by side.

5. The image taking apparatus as recited in claim 1, further comprising a selector for specifying one of photographing modes and a controller for automatically setting the number of images to be stored in said image memory depending on a specified photographing mode.

6. The image taking apparatus as recited in claim 5, wherein said photographing modes include a mode which gives priority to quality of image and a mode which gives priority to speed.

7. The image taking apparatus as recited in claim 6, wherein the number of images to be stored in said image memory is the maximum number of images that said image memory can store when said mode which give priority to quality of image is specified.

8. An image taking apparatus, comprising:

an image pick-up element which picks up a plurality of images different in photographing condition;

an image-pick-up-number controller which variably sets the number of images to be picked up by said image pick-up element; and

an image composer which creates a composite image by composing a plurality of images picked up by the number of images set by said

image-pick-up-number controller.

9. The image taking apparatus as recited in claim 8, further comprising an image memory which temporarily stores a plurality of images picked up by said image pick-up element.

10. The image taking apparatus as recited in claim 9, wherein the number of images to be set by said image-pick-up-number controller is the maximum number that said image memory can store.

11. The image taking apparatus as recited in claim 9, wherein the number of pixels to be picked up is capable of being specified, and wherein the number of images to be set by said image-pick-up-number controller is determined by the number of pixels specified and capacity of said image memory.

12. The image taking apparatus as recited in claim 9, further comprising a controller which discriminates whether it is possible to store images by the number of images set by said image-pick-up-number controller in said image memory, and controls so as not to pick up images when it is discriminated to be impossible to store said images.